



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/425,694	10/22/1999	ROLAND BRUNNER	BRUNNER-ET-A	9906

7590 03/05/2003
COLLARD & ROE PC
1077 NORTHERN BLVD
ROSLYN, NY 11576

EXAMINER

SONG, MATTHEW J

ART UNIT PAPER NUMBER

1765

DATE MAILED: 03/05/2003

29

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/425,694

Applicant(s)

BRUNNER ET AL.

Examiner

Matthew J Song

Art Unit

1765

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 19 February 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: _____

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____

Response to Arguments

Applicant's arguments filed 2/19/2003 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner does not refer in a comprehensive way to the arguments presented in the Amendment filed August 14, 2002 (pg 2) is noted but has not been found persuasive. No comment between the presently claimed invention and Verhaverbeke et al was made because the Verhaverbeke reference is a secondary reference used to show the obviousness of using a process without a DI water-rinsing step. A proper Graham vs. Deere analysis of the primary reference, Pirooz et al, was made to show the differences between the prior art and the instantly claimed invention.

In response to applicant's argument that a modifying a procedure of Pirooz et al by treating the semiconductor wafers with O₃ and then treating the wafers with a liquid containing HCl in a separate bath is not in compliance with the teaching of Verhaverbeke et al is noted but has not been found persuasive. The applicant's argument (pg 3) is based on a teaching in Verhaverbeke et al that comprises directly displacing the volume of the first reactive fluid by providing a second reactive process liquid (col 16, ln 41-43). This is only one specific embodiment of Verhaverbeke et al and the reference is not as limited as suggested by applicant. Verhaverbeke et al also teaches another embodiment where the electronic component is moved from one reaction chamber to another, wherein each reaction chamber contains a different reactive chemical process fluid (col 3, ln 55-60).

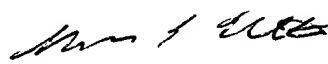
In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (pg 4), it must be recognized that any judgment on

Art Unit: 1765

obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that a comparison between Verhaverbeke et al and the present invention reveals significant differences is noted but has not been found persuasive. Firstly, the Verhaverbeke reference is used a secondary reference to modify the primary reference, Pirooz et al. The applicant has incorrectly attempted to show Verhaverbeke to be the closest prior art. Furthermore, applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The differences between the instant invention and the Verhaverbeke reference are taught by Pirooz et al.

In response to applicant's argument that a person skilled in the art would never combine the teaching of Verhaverbeke with Pirooz has been noted but has not been found persuasive. This is a mere allegation without any factual support, therefore is not given consideration. Furthermore, the Pirooz reference teaches a chemical treatment step using DI water and the Verhaverbeke reference teaches a method of improving a chemical treatment by eliminating a DI water-rinsing step (col 3, ln 15-20). Clearly, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Pirooz et al with Verhaverbeke et al, which is an improved chemical treatment by eliminating a DI rinsing step.


BENJAMIN L. UTECH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700